

REMARKS

Claims 1-18 are pending in the present application. Claims 1, 8, 12 and 17 are independent.

Kubo et al.

Claims 1-6, 8-13 and 15-17 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Kubo et al. (U.S. Patent No. 5,828,461). Applicant respectfully traverses this rejection.

Applicant maintains the arguments in his response dated January 23, 2001 and provides the following clarification of another difference between Applicant's invention and Kubo et al.

Kubo et al. disclose three types of scans including a first scan for monochrome image reading at low resolution, prescan for three-color image reading at low resolution and a fine scan for three-color image reading at high resolution. The reading conditions for the fine scan are set by the first scan data, which is different from, "generating a correction condition by processing the first image data and the second image data; and applying the correction condition to the second image data," as recited by claim 12 and similarly claims 1, 8 and 17.

Further, in Kubo et al., various types of correction conditions and image processing conditions are set based on the prescanned data, and the set correction conditions and image processing conditions are used to correct or process the fine scanned data. The fine scanned data is subjected to correction or image processing, but is not used for determining the correction conditions and image processing conditions.

For example, Kubo et al. arguably teaches correcting image data on the basis of parameters determined by combinations of print finish characteristics. As discussed in cols. 20-21, Kubo et al. performs the prescan and performs parameter setting operations based on the

prescanned image. Next, a fine scan is performed and the fine scan is corrected based on the parameters set in the prescan processing. See col. 22, lines 2-7.

Further, Kubo et al. states,

Thus, after various setting operations are effected for the image data read at a low resolution and the image is confirmed, the image data is read at a high resolution and corrected under the previously-set correcting condition, and the corrected image data is stored in the monitor data memory 52.

See col. 22, lines 8-13.

Thus, Kubo et al. bases the correction of the fine scan data on preset parameters and the parameters calculated using only the first scan data or prescan data and does not generate a correction condition based on processing the first scan data and the second scan data.

Accordingly, claims 1, 8, 12 and 17 are allowable over the prior art. Dependent claims 2-5, 9, 13 and 15-16 are allowable for at least the reasons of their corresponding independent claims. Therefore, Applicant respectfully requests removal of this rejection.

Luther et al.

Claims 1, 8, 9, 12, 13 and 17 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Luther et al. (U.S. Patent No. 6,005,680). Applicant respectfully traverses this rejection.

Luther et al. fails to teach all the features of independent claims 1, 8, 12 and 17 as cited above.

Luther et al. disclose two or more types of scans. The first scan is a monochrome image data scan by which binary (bi-level) data, namely monochrome data, is read for identifying

blocks of the same image type when a document, including various types of images such as character (text), line drawing, grayscale image (halftone image) and full-color image are captured. The second scan captures the grayscale information and full-color information at a lower resolution than in the first scan, and the captured information is used for replacing the binary data captured by the first scan in the grayscale image block or full-color image block identified in the first scan.

Once the two scans are performed, Luther et al. further discloses substituting the gray-scale or color data for the bi-level data, where appropriate. The only type of analysis of the image data involves assuring that the gray-scale, color and bi-level data are properly combined to generate appropriate image data.

Thus, Luther et al. does not teach calculating a correction condition for the second scan data. Rather, Luther et al. uses the second scan data, which is grayscale and color data, to add features to the bi-level scan data. Therefore, Luther et al. could not possibly teach, "generating a correction condition by processing the first image data and the second image data; and applying the correction condition to the second image data."

Accordingly, claims 1, 8, 12 and 17 are allowable over the prior art. Dependent claims 9 and 13 are also allowable for at least the reasons of their corresponding independent claims.

Applicant respectfully requests removal of this rejection.

Benker et al.

Claims 1, 8, 9, 12, 13 and 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Benker et al. (U.S. Patent No. 4,987,440). Applicant respectfully traverses this rejection.

Benker et al. does not teach all the features of claim 1. In particular, claims 1 and 8 include both a prescan and a fine scan, while claims 12 and 17 recite a first scan and a second scan, "wherein the first scan is performed at a first resolution and the second scan is performed at a second resolution."

Benker et al. arguably teaches a method and an apparatus for positioning image areas of film including a first scan and a second scan which are performed by two different sensors for detecting marked density jumps in a film strip and calculating the image region. However, other than the use of different sensors and the second scan occurring after the first scan, Benker et al. teaches no apparent difference between the first and second scan such as the resolution differences in a prescan and fine scan or performing a first scan at a first resolution and a second scan at a second resolution.

Accordingly, claims 1, 8, 12 and 17 are allowable over the prior art. Regarding dependent claims 9 and 13, these claims are allowable for at least the reasons of their corresponding independent claims. Therefore, Applicant respectfully requests removal of this rejection.

Kubo et al. in view of Sakaguchi

Claims 7, 14 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kubo et al. in view of Sakaguchi (U.S. Patent No. 5, 995,201). Applicant respectfully traverses this rejection.

Kubo et al. and Sakaguchi either alone or in combination, do not teach all the features of claims 7, 14 and 18. As discussed above, Kubo et al. does not teach all the features of independent claims 1, 12 and 17 from which these claims depend. Sakaguchi fails to make up

for the deficiencies of Kubo et al. Accordingly, claims 7, 14 and 18 are allowable over the prior art, and Applicant respectfully requests removal of this rejection.

CONCLUSION

In view of the foregoing, Applicants submit that claims 1-18 are patentable over the relied upon references, and that the application as a whole is in condition for allowance. Early and favorable notice to that effect is respectfully solicited.

In the event that any matters remain at issue in the application, the Examiner is invited to contact Jayne Saydah (Reg. No. P-48,796) at (703) 205-8000 in the Northern Virginia area, for the purpose of a telephonic interview.

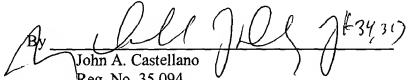
Attached hereto is a marked-up version of the changes made to the application by this Amendment.

Pursuant to 37 C.F.R. 1.17 and 1.136(a), the Applicant respectfully petitions for a three (3) month(s) extension of time for filing a response in connection with the present application, and the required fee of \$890.00 is attached.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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JAC/JES:ewd

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Please amend the claims as follows:

12. (Amended) An image reading method comprising:

performing a first scan of an image and generating first image data;

performing a second scan of the image and generating second image data;

generating a correction condition by processing the first image data and the second image data; and

applying the correction condition to the second image data,

wherein the first scan is performed at a first resolution and the second scan is performed at a second resolution.

17. (Amended) An apparatus for reading an image comprising:

a scanner adapted to perform a first scan of an image and a second scan of an image;

a data processor adapted to generate image data from the image which has been scanned by the scanner;

a correction condition setting subsection adapted to compare image data from the first scan and the second scan and develop a correction condition such that the first scan data and the second scan data match; and

a fine scanned data correction section which uses the correction condition to correct the image data from the second scan,

wherein the first scan is performed at a first resolution and the second scan is performed at a second resolution.